

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-6. (Cancelled)

7. (Previously presented) An isolated polypeptide comprising the amino acid sequence as set forth in SEQ ID NO: 11.

8-51. (Cancelled)

52. (Currently amended) A pharmaceutical composition comprising a polypeptide that comprises ~~at least one of the amino acid sequences set forth in SEQ ID NO: 10 and SEQ ID NO: 11~~ the polypeptide of claim 7 or 63 in a pharmaceutically acceptable carrier.

53-61. (Cancelled)

62. (Previously presented) A Tir polypeptide fragment comprising the amino acid sequence set forth in SEQ ID NO: 7.

63. (Currently amended) An ~~immunogen~~ isolated Tir polypeptide that consists of comprising a Tir polypeptide fragment that comprises at least 8 consecutive amino acids of SEQ ID NO: 10 or SEQ ID NO: 11.

64. (Currently amended) The ~~immunogen~~ isolated Tir polypeptide of claim 63 wherein the Tir polypeptide fragment comprises the amino acid sequence set forth in SEQ ID NO: 7.

65. (Currently amended) A fusion protein comprising an isolated Tir polypeptide that comprises the amino acid sequence of ~~SEQ ID NO: 10 or SEQ ID NO: 11~~ fused to a non-Tir protein sequence.

66. **(Previously presented)** The fusion protein of claim 64 wherein the fusion protein comprises a cleavage site located between the Tir polypeptide and the non-Tir protein sequence.

67. **(Previously presented)** The fusion protein of claim 65 wherein the non-Tir protein sequence is an immunoglobulin (Ig) Fc domain.

68. **(Previously presented)** The fusion protein of claim 65 wherein the non-Tir protein sequence is a marker polypeptide selected from the group consisting of an enzyme, a fluorescent protein, and a luminescent protein.

69-72. **(Cancelled)**

73. **(Previously presented)** The method of claim 23 wherein the immune response is a protective immune response.

74. **(Currently amended)** The method of claim 23 wherein the immunogen comprises a polypeptide comprising ~~at least one of~~ the amino acid sequence[[s]] set forth in ~~SEQ ID NO: 10 and~~ SEQ ID NO: 11.

75. **(New)** An isolated nucleic acid molecule which encodes a Tir protein comprising the amino acid sequence of SEQ ID NO: 11 or an amino acid sequence variant which is at least 95% identical to an amino acid sequence as set forth in SEQ ID NO: 11, wherein the variant has the ability to induce an immune response in a host to a Tir-producing organism.